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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,607	04/05/2006	Noriyuki Fukui	288058US2PCT	4208
22850	7590	08/09/2010	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			CASCA, FRED A	
			ART UNIT	PAPER NUMBER
			2617	
			NOTIFICATION DATE	DELIVERY MODE
			08/09/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/574,607

Applicant(s)

FUKUI ET AL.

Examiner

FRED A. CASCA

Art Unit

2617

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 01 July 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 10-31.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/VINCENT P. HARPER/  
Supervisory Patent Examiner, Art Unit 2617

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments with respect to the rejection of the claims under USC 112, first paragraph, is persuasive. Accordingly, the rejection of claims under 112, first paragraph is withdrawn. However, the rejection of claims 10-31 under USC 103(a) is maintained.

Applicant's arguments with respect to the rejection of claims under USC 103(a) have been fully considered but they are not persuasive. In response to applicant's arguments that "claim 10 is distinguishable over Parantainen as the applied reference fails to disclose or suggest a NAK signal that is received from the base station as a response to the new data," the examiner respectfully disagrees for the following reasons:

1. Parantainen clearly discloses a base station receiving an ACK/NAK from a mobile station [see Figure 4, step 404]. Further, a person of ordinary skill in the art would understand that transmitting of an ACK/NAK is an ARQ protocol used to ensure that a Peer-to-Peer communication is performed accurately between two communication terminals (e.g., a mobile station and base station). The Peer-to-Peer Protocol allows the transmission of ACK/NAK by the terminals that receives data and the reception of ACK/NAK by the terminals that transmit data. Since, a mobile station transmitting data to a base station is also able to receive data from a base station, thus, a person of ordinary skill in the art would understand that when a base station receives ACK/NAK from a mobile station, then a mobile station would also be able to receive the same from the base station.

2. The examiner asserts that claim 10 has been rejected under 103(a) over Parantainen in view of Haartsen and Love. Accordingly Love reference also discloses the above limitation at least in paragraph 64. Love discloses "When a MS 1014 receives a ACK/NAK transmissions it uses the information to determine uplink transmission." [see Paragraph 64]. From the above disclose in Love, uplink corresponds to the communication between the base station and the MS, thus, the MS receiving ACK/NAK is equivalent to the MS receiving ACK/NAK from the base station. Similarly, the disclosure of retransmitting a corresponding packet in response to receiving a NACK is analogous to the retransmission of data in response to a NAK. Thus, Love discloses the limitation, "a NAK signal that is received from the base station as a response to the new data".

In response to Applicant's arguments since ACK and NAK signals are not transmitted from in response to another ACK signal or transmitted control signaling, there is no reason for the base station of Parantainen to transmit a NAK signal in response to the ACK signal or control signaling transmitted from the mobile station of Parantainen. That is, there is no reason to combine Parantainen with any other reference to modify the mobile station of Parantainen "to autonomously transmit a retransmission data to the base station without sending a transmission request to the base station for a resource to transmit the retransmission data, in case the new data is transmitted to the base station at the third step and the NAK signal is received from the base station as a response to the new data," as recited in Claim 1, (Emphasis added). In this regard, "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR, Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 418 (2007) (quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006))(emphasis added), the examiner asserts the applicant's assessments of the transmission of ACK/NAK by Parantainen is not relevant in the rejection. Parantainen discloses receiving of a ACK/NAK in response to data transmission, not in response to ACK/NAK transmission. Applicant's claim also corresponds to reception of ACK/NAK in response to transmission of data. Reference Love is used to emphasize the reception of ACK/NAK from a base station and to further disclose the concept of autonomous retransmission of data without sending a transmission request for the purpose of saving time on transmissions. Thus, the combinations make sense and a person of ordinary skill in the art would be able to combine the references. Further, the examiner asserts that when a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. See MPEP 2141.

In response to arguments that Parantainen and Love teach away from the autonomously transmitting a retransmission data to the base station without sending a transmission request to the base station for a resource to transmit the retransmission data, in case the new data is transmitted to the base station at the third step and the NAK signal is received from the base station as a response to the new data, the examiner respectfully disagrees. There are certainly advantages and disadvantages to autonomous and non-autonomous retransmissions. Nonetheless, the examiner reviewed Love's disclosures and found no rational to render that the autonomous retransmission Love is teaching away. Love's teaching of a mobile station having two scheduling modes has nothing to do with teaching away. Love teaches that a mobile station can send retransmissions autonomously without asking for a request to retransmit for the advantage of saving time. Further, applicant's arguments that "Love's the timing of uplink transmissions in an environment supporting MS-autonomous scheduling, (whereby a MS may transmit whenever the MS has data in its transmit buffer and all MSs are slowed to transmit as needed) by the individual MSs can be quite sporadic and/or random in nature", indicates teaching away, the examiner respectfully disagrees. This recitation/interpretation of reference Love has no rational basis for teaching away. As mentioned above, Love teaches that a mobile station can send retransmissions autonomously without asking for a request to retransmit for the advantage of saving time. And a mobile station having two modes, an autonomous and a non-autonomous, does not provide any rational for teaching away.

With respect to applicant's arguments that Parantainen teaches away, the examiner respectfully disagrees. The examiner has read the entire Parantainen disclose and has found no indication of teaching away by Parantainen. In response to arguments that "the mobile

terminal of Parantainen transmits an acknowledgment signal or a control signal to the base station of Parantainen using information on the uplink channel such as allocating a time slot. Accordingly, the mobile station of Parantainen requires at least information on a time slot to transmit the ACK or control signal to the base station. Thus, the transmission of data from the mobile station to the base station as described in Parantainen is non-autonomous", the examiner respectfully disagrees. The examiner asserts that the above presumption/interpretation of applicant has nothing to do with teaching away. Parantainen does not anywhere discuss any disadvantages of autonomous retransmissions.

In response to applicants arguments that the combination of Haartsen and Love with

Parantainen is improper and does not present a prima facie case of obviousness for Claim 10, the examiner respectfully disagrees. The examiner asserts that it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). Both references Parantainen and Love disclose communication between a mobile station and a base station using ARQ protocol by sending/receiving ACK/NAK to endure reliable Peer-to-Peer communication resource assignment by the base station. Love further teaches the concept of autonomous sending of retransmission packets in response to a NAK, as claimed by applicant. Parantainen further discloses resource assignment by the base station as claimed. Further, Haartsen discloses further the concepts of NAK in a Peer-to-Peer Protocol. Thus, the combination of the references is appropriate to a person of ordinary skill in the art, and a person of ordinary skill in the art would be able combine these references to reach the claimed invention by the applicant. Applicant's arguments that "claims 11-13 recite features analogous to the claim 10," have been considered and they are not persuasive for the same reasons/rational that the examiner has indicated above with reference to claim 10. Applicant's arguments with respect to dependent claim 14, the cited references do not disclose "the retransmission data is transmitted after a predetermined time" has been considered but they are not persuasive. All cited references refer to ARQ protocol, where a person of ordinary skill in the art would understand that in an ARQ Protocol (e.g., in a Stop-and-Wait ARQ) a retransmission is sent due to a transmission failure after a "time out" period. This "time out" period is equivalent to the predetermined time of claim 4. Thus, a person of ordinary skill in the art would be able to modify the cited combinations such that the retransmission is sent after a predetermined period of time as claimed. .